What is claimed is:

1. A photothermographic material comprising, on a support, a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder, wherein the photothermographic material comprises a compound having a group adsorptive to silver halide and a reducible group or a precursor of the compound, a silver behenate content of the non-photosensitive organic silver salt is at least 30% by mole and less than 80% by mole, and the binder has a glass transition temperature (Tg) of 45° C or higher.

2. The photothermographic material according to claim 1, wherein a silver iodide content of the photosensitive silver halide is 5% by mole or more.

3. The photothermographic material according to claim 2, wherein the silver iodide content of the photosensitive silver halide is 30% by mole or more.

4. The photothermographic material according to claim 3, wherein the silver iodide content of the photosensitive silver halide is 70% by mole or more.

5. The photothermographic material according to claim 4, wherein the silver iodide content of the photosensitive silver halide is 90% by mole or more.

6. The photothermographic material according to claim 1, wherein an average grain size of the photosensitive

silver halide is 5 nm to 80 nm.

7. The photothermographic material according to claim 6, wherein the average grain size of the photosensitive silver halide is 10 nm to 55 nm.

8. The photothermographic material according to claim 1, wherein the binder comprises polyvinyl butyral in an amount of 50% by weight or more.

9. A photothermographic material comprising, on a support, an image forming layer comprising at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder, wherein the photothermographic material comprises a compound having an adsorptive group and a reducible group, or a precursor of the compound, and the photosensitive silver halide comprises iridium.

10. The photothermographic material according to claim 9, wherein the amount of iridium is 1×10^{-8} mol to 1×10^{-1} mol per one mol of the silver halide.

11. The photothermographic material according to claim 10, wherein the amount of iridium is 1×10^{-6} mol to 1×10^{-3} mol per one mol of the silver halide.

12. The photothermographic material according to claim 9, wherein the photothermographic material comprises a compound that can be one-electron-oxidized to provide a one-electron oxidation product which releases one or more

electrons due to a subsequent reaction.

13. The photothermographic material according to claim 12, wherein the compound that can be one-electron-oxidized is selected from the following compounds of Groups 1 to 5:

(Group 1) a compound that can be one-electron-oxidized to provide a one-electron oxidation product which further releases at least two electrons, due to being subjected to a subsequent bond cleavage reaction;

(Group 2) a compound that has at least two groups adsorptive to the silver halide and can be one-electron-oxidized to provide a one-electron oxidation product which further releases one electron, due to being subjected to a subsequent bond cleavage reaction;

(Group 3) a compound that can be one-electron-oxidized to provide a one-electron oxidation product, which further releases at least one electron after being subjected to a subsequent bond formation;

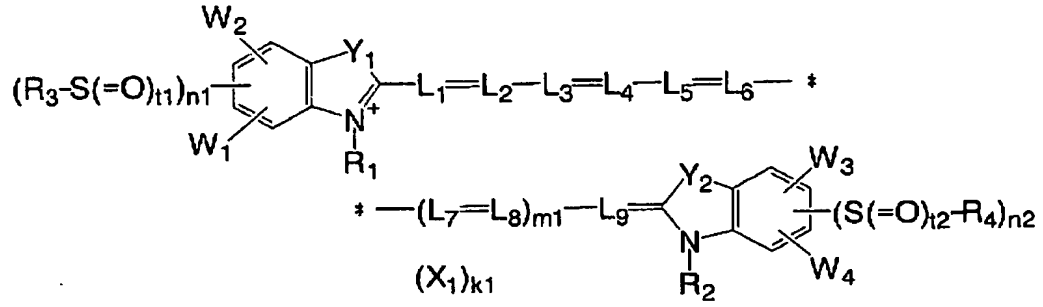
(Group 4) a compound that can be one-electron-oxidized to provide a one-electron oxidation product which further releases at least one electron after a subsequent intramolecular ring cleavage reaction; and

(Group 5) a compound represented by X-Y, in which X represents a reducible group and Y represents a leaving group, and convertable by one-electron-oxidizing the

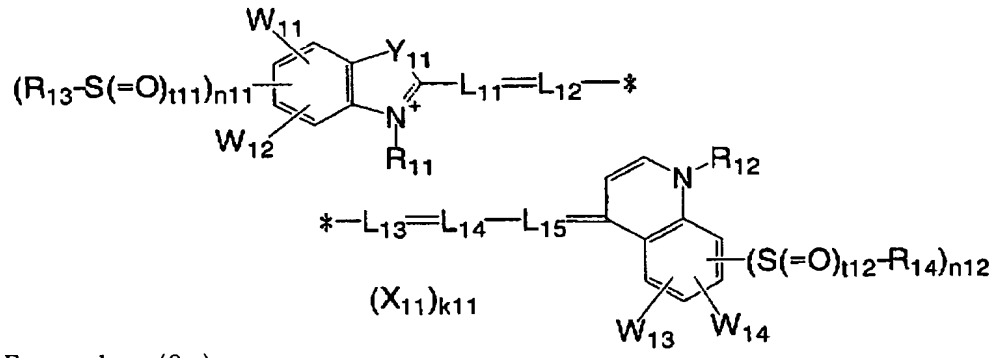
reducible group to a one-electron oxidation product which can be converted into an X radical by eliminating the leaving group in a subsequent X-Y bond cleavage reaction, one electron being released from the X radical.

14. The photothermographic material according to claim 9, wherein the photothermographic material comprises at least one spectral sensitizer represented by any one of the following formulae (3a) to (3d):

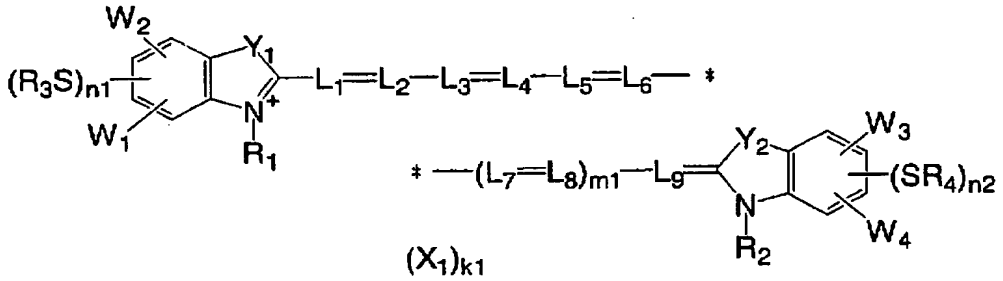
Formula (3a)



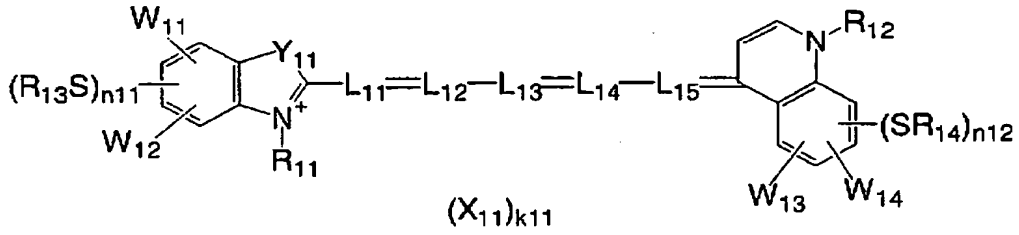
Formula (3b)



Formula (3c)



Formula (3d)



wherein, Y_1, Y_2 and Y_{11} each represent an oxygen atom, a

sulfur atom, a selenium atom or a -CH=CH- group; L_1 to L_9 and L_{11} to L_{15} each represent a methine group; R_1, R_2, R_{11} and R_{12} each represent an aliphatic group; R_3, R_4, R_{13} and R_{14} each represent a lower alkyl group, a cycloalkyl group, an alkenyl group, an aryl group or a heterocyclic group; W_1, W_2, W_3, W_4, W_{11}, W_{12}, W_{13} and W_{14} each represent a hydrogen atom or a substituent, or alternatively together represent a group of nonmetallic atoms required to form a condensed ring by bonding between W_1 and W_2, W_3 and W_4, W_{11} and W_{12}, and W_{13} and W_{14}, respectively, or a group of nonmetallic atoms required to form a 5- or 6-membered condensed ring R_3 and W_1, R_3 and W_2, R_{13} and W_{11}, R_{13} and W_{12}, R_4 and W_3, R_4 and W_4, R_{14} and W_{13}, and R_{14} and W_{14}, respectively; X_1 and X_{11} each represent an ion necessary for neutralizing a charge in a molecule; k1 and k11 each represent a number of ions necessary for neutralizing a charge in a molecule; m1 represents 0 or 1; n1, n2, n11 and n12 each represent 0, 1 or 2, provided that at least one of n1 and n2 represents 1 or 2, and that at least one of n11 and n12 represents 1 or 2; and that t1, t2, t11 and t12 each represent 1 or 2.

15. The photothermographic material according to claim 9, wherein the image forming layer is formed by coating the support with a coating solution for an image forming layer prepared by at least the following 1) and 2):

1) preparing the photosensitive silver halide; and

2) preparing the non-photosensitive organic silver salt.

16. The photothermographic material according to claim 15, wherein the photosensitive silver halide is added while preparing the non-photosensitive organic silver salt.

17. The photothermographic material according to claim 9, wherein a silver iodide content of the photosensitive silver halide is 5% by mole or more.

18. The photothermographic material according to claim 17, wherein the silver iodide content of the photosensitive silver halide is 40% by mole or more.